

Amendments to the Title:

Please change the Title to “Image Processing Apparatus for Converting Color Data by Referring to a Reconstructed Color Conversion Table and an Image Processing Method for the Same.”

Amendments to the Specification:

Please replace Paragraph [0097] (the paragraph that spans pages 37 and 38) with the following rewritten paragraph:

[0097] FIG. 16(c) shows an encoded reference LUT. Open circles in FIG. 16(c) represent lattice points in the encoded reference LUT, which is obtained by encoding the reference LUT shown in FIG. 16(b). The C tone value stored at each lattice point in the encoded reference LUT of FIG. 16(c) is obtained by multiplying the C tone value stored at the corresponding lattice point in the reference LUT of FIG. 16(b) by the preset value of the encode coefficient. The color conversion process adds new lattice points between the respective existing pairs of lattice points in the encoded reference LUT and calculates the C tone values of the newly added lattice points by interpolation to reconstruct an LUT. Closed circles in FIG. 16(c) represent lattice points newly added in the process of reconstruction of the encoded reference LUT. A ~~curve of broken~~ curved, dashed line shown in FIG. 16(c) represents a color conversion characteristic curve obtained by encoding the mapping of the ideal color conversion shown in FIG. 16(a). As clearly understood from FIG. 16(c), the LUT reconstructed from the encoded reference LUT may have a significant deviation at part of lattice points from the encoded ideal color conversion characteristic curve. Such a deviation is not always made, but is often found in an area having a significant variation in encoded tone value relative to the interval between adjoining lattice points set in the reference LUT. As described above, multiplication by the encode coefficient expands the variation in tone value. The potential for the deviation is thus heightened in the area having a large gradient of the encode function between the adjoining lattice points.

Please replace Paragraph [0103] (the paragraph that spans pages 40 and 41) with the following rewritten paragraph:

[0103] FIG. 17(b) conceptually shows a color conversion table obtained by reconstructing the intermediate table. In this reconstructed color conversion table, a new lattice point shown by a closed circle is added between each existing pair of lattice points in the intermediate table. Encoding of the reconstructed color conversion table gives an encoded color conversion table shown in FIG. 17(c). Open circles and closed circles in FIG. 17(c) represent lattice points in the encoded color conversion table. A ~~curve of broken~~ curved, dashed line in FIG. 17(c) is a characteristic curve obtained by encoding the ideal color conversion characteristic. The encoded color conversion table obtained by reconstructing the intermediate table and encoding the reconstructed table well agrees with the characteristic ~~curve of broken~~ curved, dashed line obtained by encoding the ideal color conversion characteristic as shown in FIG. 17(c). The process of color conversion with reference to this encoded color conversion table and subsequent decoding of resulting image data thus ensures accurate conversion of the color system of the image data.

Please replace Paragraph [0114] (the first full paragraph on page 45) with the following rewritten paragraph:

[0114] The modified dot density table of the second embodiment is readily obtained by modifying the dot density table of the first embodiment. The dot density table stores the settings of the dot density data of the small-size dot and the large-size dot against the C, M, Y, and K tone values of the image data. Here the image data of the C, M, Y, and K tone values have gone through the decoding process to cancel out the effects of the encoding process. The image data after cancellation of the encoding process (that is, the decoded image data) are convertible into dot density data by referring to the dot density table. For example, a tone value '64' of the image data is converted into dot density data 'ds64' with respect to the small-size dot according to the ~~thin broken~~ thin, dashed line of FIG. 13, while being converted into dot density data 101 with respect to the large-size dot according to the thin solid line of FIG. 13.